Lighting and Controls Supplier Summit Technology Identification and Screening

Lighting and Controls Supplier Summit
Las Vegas, Nevada
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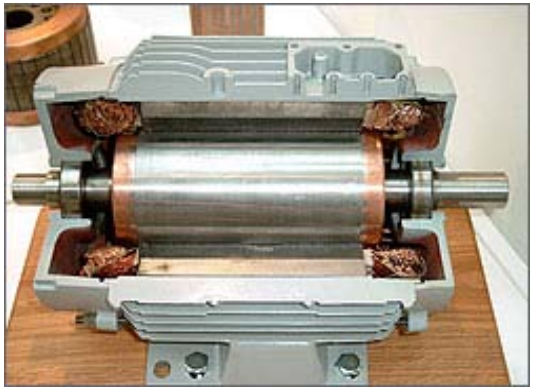
CBEA Members …

- Are striving for significant energy-efficiency improvements
- Require new technologies to help meet efficiency goals
- Seek help identifying new technologies that will help meet efficiency goals



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Objectives and Outcomes

- Casts a wide net … of interest to the partners
- Systematically screens technologies
- Presents recommendations for potential action
- Sample outcomes
  - Technology demonstrations
  - Technology specifications
  - Best practices
  - Information sharing
  - No action

Mini LED 100 µm in diameter as seen through microscope

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Summary: How It Works

1. Partners and suppliers nominate technologies

2. DOE team applies screening criteria and presents results/recommendations to CBEA subcommittees

3. CBEA members select target technologies for further action

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Technology Nominations

- Technologies nominated via the CBEA Web site: *commercialbuildings.energy.gov/alliances*

  Click on link “submit descriptions of new technologies”

- Information requested includes
  - Product/technology description
  - Novel features and advantages
  - Scope of application
  - Energy savings to be achieved OR energy produced
  - Performance metrics
  - Product maturity
  - Technology cost
  - Name of contact

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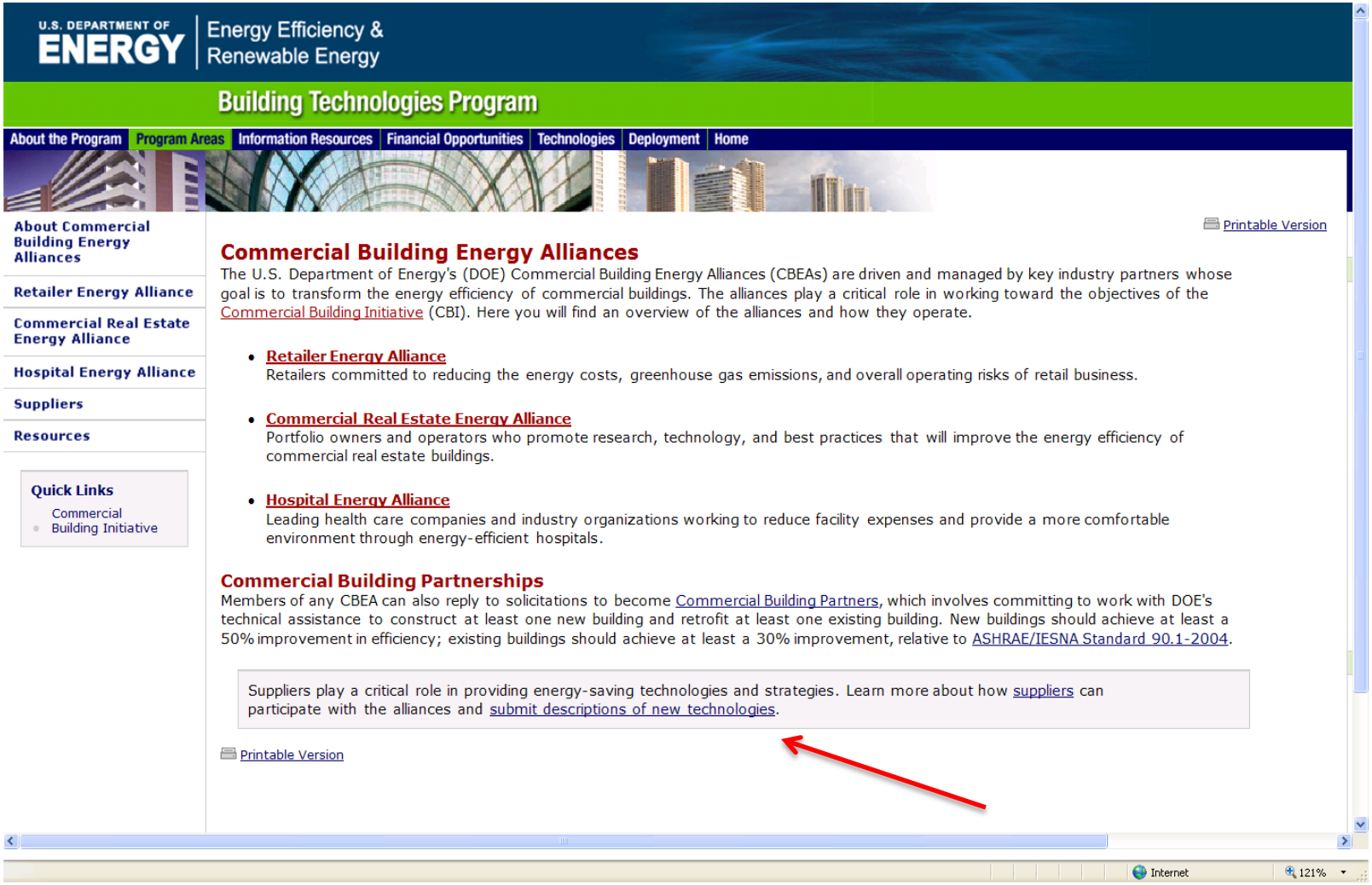
CBEA Technology Screen Web Access



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Screening Criteria

Four-step sequential screening process:

- Screen 1: Applicability — building types and ages
- Screen 2: Technology Status — current applications, feasibility/risk, and technology embodiment
- Screen 3: Cost and Benefits — energy savings, cost effectiveness, and non-energy impacts
- Screen 4: Program Fit and Suitability — potential alliance impact

2009 Progress and Results

- First round of screening: 2009
- Resulting technology categories and preliminary recommendations
  - Lighting
    - Daylighting and lighting controls
    - Interior LED lighting
    - Display LED lighting
  - Modulating HVAC & Refrigeration Systems — model and simulate modulating systems
  - HVAC and Whole Building Monitoring and Controls — best practices guidance
  - HVAC Filter Technology — best practices guidance and further research
  - Kitchen Ventilation — further technology evaluation

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2010 Progress and Plans

- Screened 72 products
- Passing technologies
  - Advanced building materials
  - Lighting controls, LED lighting, and integrated DC power distribution
  - HVAC system elements
  - HVAC and whole building monitoring and controls
  - Onsite power generation and storage
- Will develop recommendations and coordinate with CBEA subcommittees
- **Next product screening to start in early summer**

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Observations to Date

- Technologies generally available now; few still in development
- Incremental improvements typical
- Many opportunities remain
  - Subsector-specific applications
  - Technologies still in development
  - More radical departures from current technologies

http://spaic.in/yahoo_site_admin/assets/images/Microscope.260234336.jpg

Caveats

- DOE does not purchase or certify nominated products
- DOE does not endorse or discourage the use of nominated products
- This is not a competition
- Products are screened against CBEA criteria
  - Screening results are not made public
- Information on nominated products is made available to CBEA members only via members-only Web site
- Vendor visits, demonstrations, and presentations are not a part of the process

Final Thoughts

- **Participate!** Nominate your products through the Web site

- For further information:

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